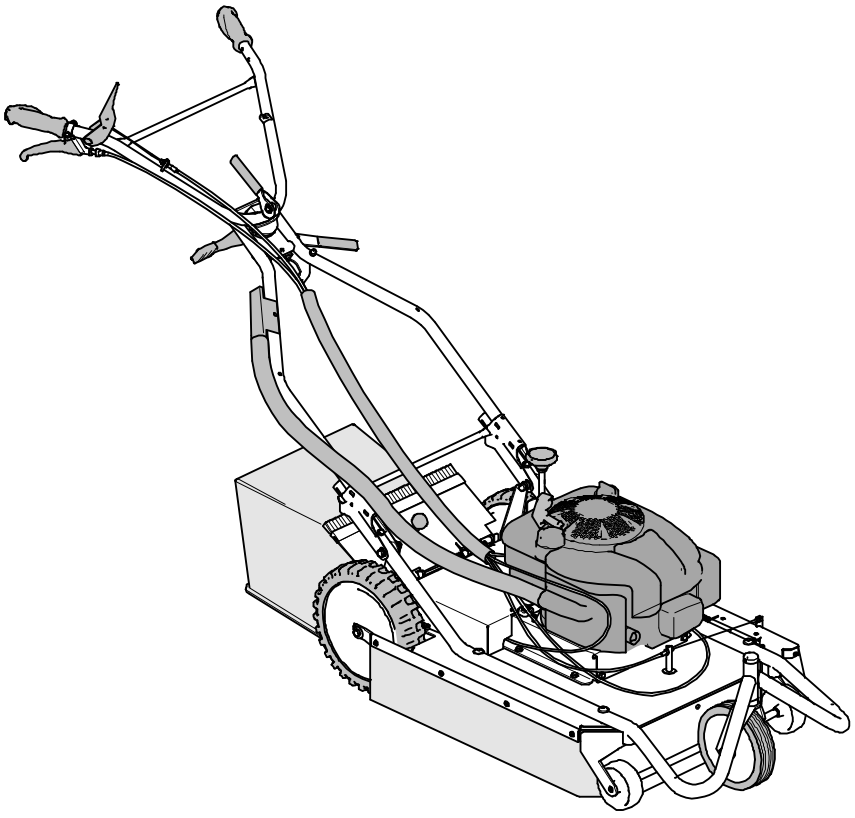
Operating Instructions

WeedHex

AS 50 B1/4T



From serial number: 016610020001
Issued: 04 July 2011, V8.0
EN-Translation of the Original Operating Instructions

Preface

Please fill in all data referring to your device. When ordering spare parts, provide your dealer with the device and engine number.

Serial number:

Engine number:

Date of purchase:

Address of dealer:

Dear customer:

Congratulations on your purchase. You have acquired a reliable quality product by “AS-Motor Germany”.

This product has been manufactured according to modern manufacturing methods and comprehensive quality assurance measures. Only when you are satisfied with your device, we have attained our goal.

Read these operating instructions carefully and attentively so that your device operates smoothly and you and others are safe from any hazards. If you have questions concerning your device, please contact your dealer or call our customer service (telephone +49/(0)7973/9123-0). For international AS partners, please see: www.as-motor.de/worldwide.

“AS-Motor Germany” wishes you much joy with your new device.

Intended use

The device is exclusively intended for cleaning of paved surfaces and edges covered with moss and weeds.

Only use attachments and cutting tools authorised by “AS-Motor Germany”.

Any use exceeding this purpose is inadmissible. The manufacturer is not responsible for any damage resulting from this. Observe the required maintenance and repair measures.

The user of the device is responsible for accidents or damage to other persons or their property!

The device **must not** be used

- on public roads.
- as drive system for any type of work tools and tool sets that are not approved by AS-Motor.
- for sweeping or mowing over unpaved surfaces.

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Explanation of the symbols

Symbols in the instructions

In these operating instructions, the following symbols are used to denote special dangers.

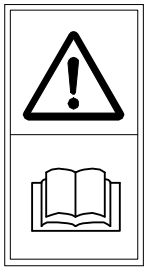
Warning.
These symbols denote special dangers.

Prohibition sign.
These symbols denote inadmissible procedures.

Directive sign.
These symbols denote required protective measures.

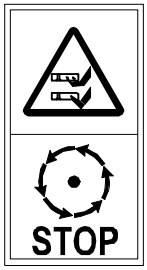
Symbols on the device

The following symbols are placed on the device to inform you must be careful and attentive when using the device:

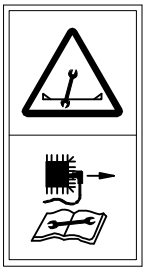


Working with the device requires extreme cautiousness. Read the operating instructions before you use the device.

Risk of injury!
Make sure that no one is within the danger zone of the device. Objects may be ejected. The danger zone extends for at least 15 metres.



The rapidly rotating tool can cause life-threatening injuries or significant damage! Pay special attention to keeping your hands and feet away from the tool when the device has been put into operation.

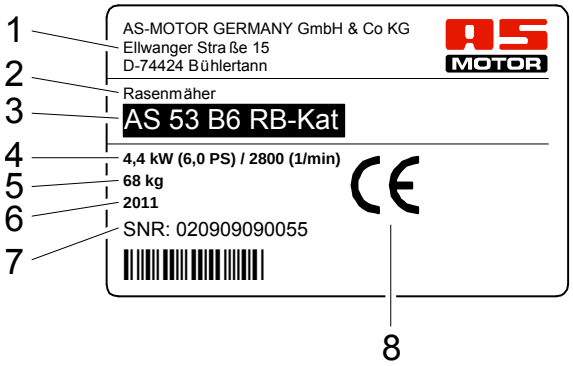


Prior to any repair and maintenance work, pull off the spark plug connector.

Noise is causing health problems. Use personal ear protection to avoid hearing damage.

Type plate

The type plate on the device provides you with information on the device type and the technical data.



1	Name and address of the manufacturer
2	Device designation
3	Type designation
4	Rated power output in kW / engine speed
5	Weight
6	Year of manufacture
7	Serial number
8	CE marking

Safety instructions

Get informed!

For your safety, read these operating instructions with care. Familiarize yourself with the control elements and the proper use of the device. Share these operating instructions with other users of the device.

Before you use the device for the first time, let the dealer instruct you regarding safe use.

User restrictions and hours of operation

Never give your children or other persons who are not familiar with the operation instructions permission to use the device. Persons under 18 years old may operate the device only under supervision. Local regulations will determine the minimum age of the user and the hours of operation.

Unsuitable for the operation of the device are persons

- Who are under the influence of alcohol, drugs, or medicine that slows down reaction time.
- With physical and mental impairments.

People fitted with pace makers are not allowed to touch any current carrying parts of the ignition system.

Safe handling of fuel

Danger!
Fuel is toxic and highly inflammable.

Danger of fire and explosion!
Keep the fuel away from ignition sources and do not smoke while handling the device.
Do not inhale fuel vapours; they are dangerous to your health.

Use gloves and avoid skin contact with the fuel.

Fuel up outdoors only when the engine is cool and not running. Use a filler or funnel.

Do not spill any fuel and do not let the fuel get into the canalisation or ground water.

If you spilled fuel, do not start the device until the fuel vapours have evaporated (wipe dry). Move the device away from the area where the fuel was spilled.

Always close the tank cap securely and do not open it while the engine is running or the device is still hot.

Drain the fuel tank only when outdoors. Use a suitable container or run the tank empty.

Keep the fuel away from children and store it in a suitable container in a dark, cool, and dry location.

Never park the device with fuel in the tank inside a building where fuel vapours could come in contact with open fire or sparks.

Immediately replace a damaged fuel tank or tank cap (authorised dealership).

First aid

When swallowing fuel or inhaling fuel vapours, do not force vomiting and immediately consult a doctor.

In case of skin contact, immediately wash with water and soap. Change your soiled clothing as soon as you can.

Measures in case of a fire

In case of a fire, use foam, dry powder extinguisher, or carbon dioxide (CO_2). Never douse with water!

Check the device prior to use

Prior to use, check by visual inspection the brushes, drive and fastening components for proper condition and firm seating.

Never use the device with defective covers, brush strip, side and rear flap, protection skirt, or dirt collecting bag.

Do not remove, change or override any safety devices or control elements.

Observe the maintenance instructions and replace damaged or worn parts immediately.

Have an authorized service centre check the device if the brushes do not stop within 3 seconds after being switched off.

Use caution during operation

Do not start the engine:

- if fuel was spilled.
- in closed or poorly ventilated rooms (danger of poisoning!).
- if there are other persons nearby.

Only start the device when your feed are positioned at a safe distances from the brushes.

During startup of the engine, do not tilt the device.

Do not touch the engine or the silencer. They become very hot during operation and you can get burned. Resulting unintentional movements constitute an additional injury hazard.

Switch off the engine and wait until the brushes come to a standstill

- before you tilt or transport the device.
- if you step away from the device, even for just a short time.
- when you drive on areas not to be worked on.
- before you refuel.

Switch off the engine, wait until the brushes come to a standstill, and pull off the spark plug connector

- before you clean or check the device or carry out work at the device.
- before you unblock and unclog the discharge area.

Prior to brushing

Personal protective measures

During brushing, always wear safety shoes with good grip, long trousers, and gloves. Do not brush with open sandals or while shoeless.

Noise is causing health problems. Use personal ear protection to avoid hearing damage. Wear safety glasses during work.

In case of high dust development, wear a dust mask.

Preparing the work area

Check the area to be brushed carefully prior to starting work. Remove all rocks, sticks, wires, or other objects that can be propelled away from the device.

Use caution during brushing

Risk of injury

Always stay within hearing range to other persons who can assist you in case of an emergency.

Danger:
Risk of injury caused by thrown out objects.
Never brush while persons, children, pets, or property are in the vicinity.

The danger zone extends for at least 15 metres.

The area in front of an next to the device is especially dangerous.

Keep your hands and feet away from rotating parts. Keep a distance to the ejection area when you work with the device.

Only work by daylight or good artificial lighting.

Always walk slowly!

Never lift or carry the device while its engine is running.

Be extremely cautious when turning the device round or pulling it toward you and when moving in reverse.

When using the device over a longer period of time, vibrations can cause disturbances in the blood supply of the hands. A generally accepted usage time cannot be determined. Use gloves.

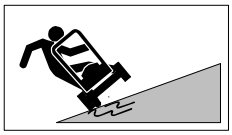
Take breaks on time.

Have an authorized service centre check the device

- if the brushes or brush strip hit an object.
- if the device starts to vibrate unusually severely.

Caution at steep slopes

Devices fitted with four stroke engines may only be operated on less than 20° slope. Otherwise, the four stroke engine can be damaged due to insufficient oil lubrication.



When working at steep slopes, there is a risk of slipping and tilting!

- Only brush on steep slopes when safe operation is assured.
- Do not brush on excessively steep slopes.
- Always brush in horizontal direction, never up- or downwards.
- Sure footing is essential for your safety, always wear skid proof safety shoes.
- Be extremely careful when changing the direction.

The device can roll away when you mow downhill. Put the device down on even surfaces only and prevent inadvertent rolling.

Fire hazard

Danger:
The brushes produce sparks when they brush against rocks.
There is a fire and explosion hazard.
Never brush in potentially explosive areas.

- Moisten the easily inflammable material before you brush over it.
- Carry a sufficient amount a suitable extinguishing agent.
- If side inclination is too great, fuel may leak from the carburetor or the tank. This poses a fire hazard!
- Watch the area you just worked on also after the brushing is completed to make sure that no fire breaks out.

To avoid risk of fire, keep the following components free of dirt, grass, hay, leaking oil, grease, etc.:

- Engine
- Silencer (manifold, guard, clearances)
- Area around the fuel tank

When work is completed

After each brushing, close the fuel valve.

Prior to leaving the device, wait until the brushes come to a standstill and pull off the spark plug connector.

After switching it off, let the device cool down for at least 20 minutes before you store it in a dry, closed, sufficiently ventilated room.

Never store the device when there is fuel in the tank inside a building where fuel vapours might come into contact with open fire or sparks.

Use caution during maintenance and repair

Only carry out maintenance work as described in these operating instructions. Have an authorised service centre carry out all other work.

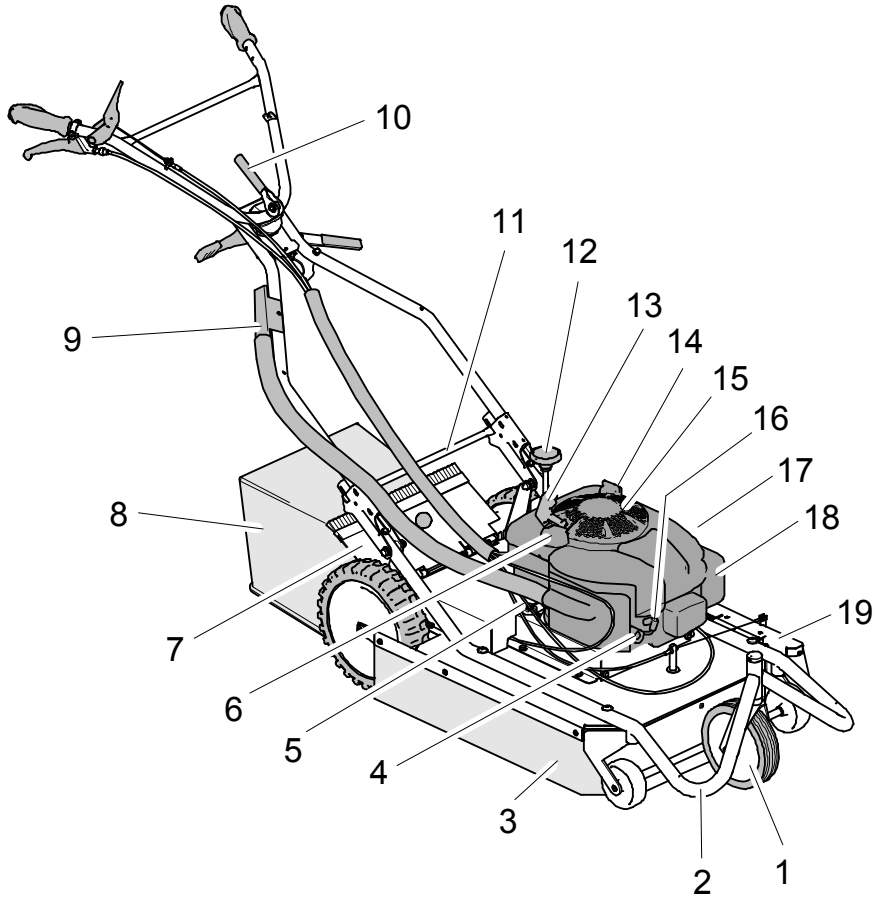
Prior to starting any maintenance work, wait until the brushes come to a standstill and pull off the spark plug connector.

We explicitly point out that, in accordance with the Product Liability Act, we are not liable for damages that were caused by our devices if

- worn or damaged parts were not repaired or replaced on time
- these damages were caused by improper repair.
- when changing a part, our original parts or parts authorised by use were not used.
- the repair work was not carried out by an authorised service station.

The same applies for spare parts and accessories.

Device description



1 Steerable front wheel

2 Protection bow

3 Protection skirt

4 Primer

5 Fuel valve

6 Tank filler spout

7 Rear flap

8 Collection bag

9 Air filter

10 Lever for lateral adjustment of handlebar

11 Clamping lever to fasten bar

12 Adjustment of contact pressure of brushes

13 Starter grip

14 Oil filler neck

15 Ventilation grid

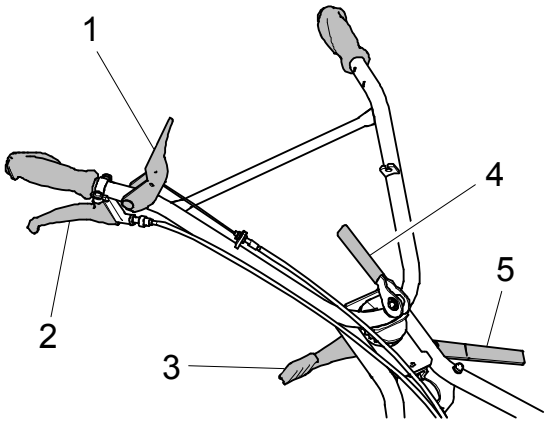
16 Spark plug connector

17 Type plate

18 Silencer

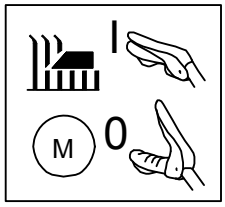
19 Side flap

Control elements



Engine brake bar (1)

The engine brake bar is a protective device. When you release the bar, the engine is shut off immediately, the brushes come to a standstill within 3 seconds.

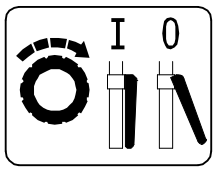


Brushes/engine on (I):
Press the bar towards the handlebar and continue to hold.

Brushes/engine off (0):
Release the bar.

Drive lever (2)

With the drive lever, you switch the drive on and off.



Drive on (I):
Press the lever towards the handlebar and continue to hold.

Drive off (0):
Release the lever.

Vario lever (3)

With the vario lever, you can continuously adjust the speed of the device while the engine is running.

MIN: = slow

MAX: = fast

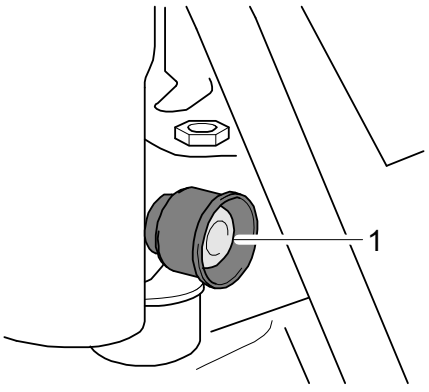
Lever for lateral adjustment of handlebar (4)

1. Release the eccentric tension lever.
2. Attention: Do not crush the Bowden cables when pivoting the handlebar. Swivel the handlebar to the side to the desired position.
3. Clamp the handlebar with the eccentric tension lever.

Lever side flap (5)

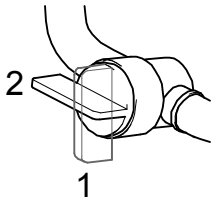
You require the side flap for brushing near a pavement or wall. Pull the lever for the side flap towards you to open the side flap.

Primer



Primer is required when cold starting the engine. By pressing onto the primer (**1**) the carburetor chamber is filled with fuel.

Fuel valve



1: Closed

2: Open

Assembly

Scope of delivery

The device is delivered in a carton.

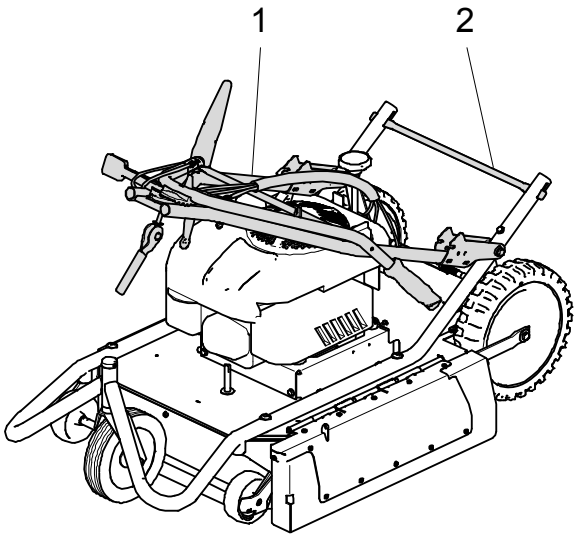
The scope of delivery includes:

- The device.
- Dirt collecting bag.
- These operating instructions.
- Warranty card.
- Tool bag.
- A set of spare brushes.

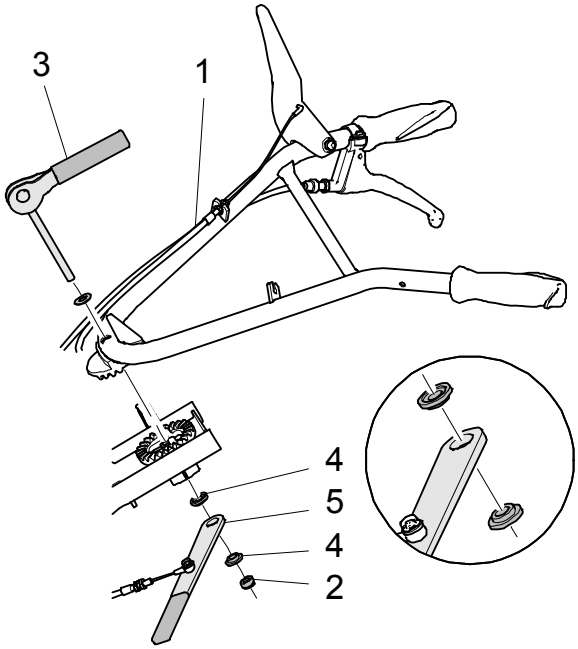
Unpacking

1. Remove the loose parts (dirt collecting bag, box inserts) from the box.
2. Cut open the front side of the box.
3. Push the device out of the box.

Guide bar and handlebar



1. Flip the guide bar (**1**) backwards and engage it with the bar fixing (**2**).

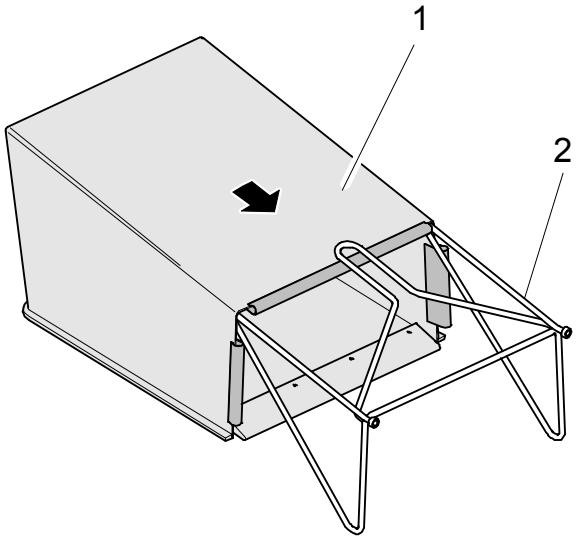


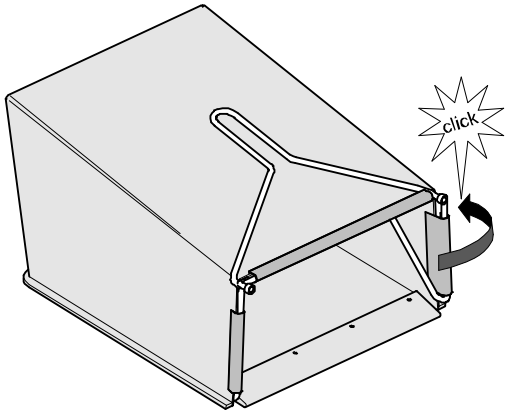
Attention: Do not crush the Bowden cables (**1**) when fixing the handlebar.

2. Slacken the hexagonal nut (**2**) at the eccentric lever (**3**) and remove the hexagonal nut and the two lever bearings (**4**).
3. Apply the handlebar to the bar.
4. Push on a lever bearing, the slide flap lever (**5**) and the second lever bearing. Make sure that the collars of both lever bearings point to the side flap lever.
5. Turn the hexagonal nut (**2**) until the eccentric lever can be tensioned with regular force and is positioned parallel to the bar.
6. Clamp the handlebar with the eccentric tension lever.

Dirt collecting bag

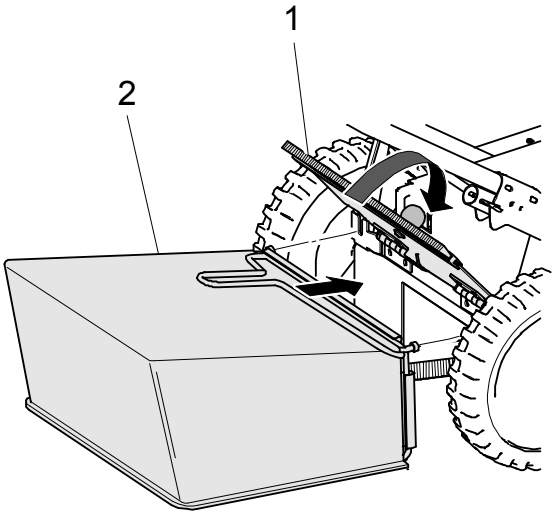
Assembling the dirt collecting bag





1. Pull the dirt collecting bag (**1**) over the frame (**2**).
2. Fasten the dirt collecting bag with plastic profiles to the frame.

Attaching the dirt collecting bag



1. Switch off the brushes and wait until the brushes come to a standstill.
2. Lift up the rear flap (**1**).
3. Insert the dirt collecting bag (**2**) into the recesses.
4. Lower the rear flap onto the dirt collecting bag.

Transport

Switch off the engine and wait until the brushes come to a stop before you lift the deivce. It takes two persons to safely lift the device.

Prior to each transport, let the device cool down for at least 20 minutes. Close the fuel valve.

For transport, you can fold up the handlebar and the guide bar.

When transporting by vehicle, secure the device against rolling, sliding, tilting, and fuel and oil leakage.

Information on brushing

Prior to brushing, check the device for completeness, proper functioning, and cleanliness. A dirty ventilation grid can damage the engine and a dirt protective grid at the silencer poses a fire hazard.

During brushing, wires can be left behind. Remove these wires after the work is completed. Brush only areas where remaining wires do not pose a hazard.

Performance depends mainly on the type and degree of contamination.

The ideal engine speed is fixed.

If the engine speed drops significantly during removal of thick growth, we recommend:

- Reduce the driving speed.
- Pull back the device and brush over the area for a second time.
- Reduce the brush pressure and brush over the area for a second time.

If the engine speed drops significantly during work on uneven ground, we recommend:

- Reduce the brush pressure
- Brush the area, if possible, for the second time, in a different direction.

Do not move over edges or steps when the engine is running.

To prevent excessive dust formation, operate the device preferably when weather conditions are humid. If this is not possible, wear a dust mask or sprinkle some water on the area.

To make sure that all weeds and dirt are ejected without clogging, we recommend to brush only while moving forward.

Prior to starting

Fuel

As fuel, use unleaded petrol (see operating instructions of the engine manufacturer).

Tanking up

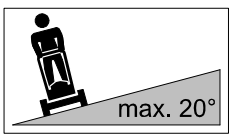
Danger!
Fuel is ignited by hot engine parts. Prior to filling up, switch off the engine and wait for at least 20 minutes until the engine has cooled down. Observe the safety instructions regarding the fuel!

Filling in the fuel:

1. For filling, use a canister with a filler spout or use as funnel.
2. Open the canister carefully so that the existing overpressure is discharged slowly and no fuel spurts out.
3. Open the tank cap carefully so that the existing overpressure is discharged slowly and no fuel spurts out.
4. Fill the fuel tank.
5. Screw the tank cap on tightly.

Checking the engine oil level

Attention! Prior to each use, check the engine oil level (see operating instructions of the engine manufacturer).



To ensure sufficient oil supply for the four stroke engine and to avoid resulting engine damage, the device may only be used on slopes up to 20°.

Starting

Danger:
During startup, there is a risk of injury caused by the rotating brushes.
Make sure that no one is within the danger zone of the brushes. Do not tip the device over to one side during startup.

Danger!
If after startup the carburetor does not close properly, fuel will overflow and a fire hazard occurs. Close the fuel valve and contact an authorised service centre.

Starting the device

1. Place the device onto a flat surface.
2. Open the fuel valve and the tank ventilation.
3. Put on the spark plug connector.
4. Only for cold start: Press the primer three times.
5. Actuate and hold the engine brake lever.
6. Pull the starter point slowly out until you feel resistance then pull out quickly – engine starts to run.
7. Let the starter rope retract slowly.

Adjusting the contact pressure of the brushes

Caution:
During adjustment of the brushes, damage to the ground can occur. Find a sturdy area for these adjustment operation.

The brush pressure can only be assessed while the engine is running.

Set the brushes only so low that they barely touch the ground.

The cleaning performance increases when the brush pressure increases, especially for hollows and tough growth.

Danger! If brush pressure is too high:

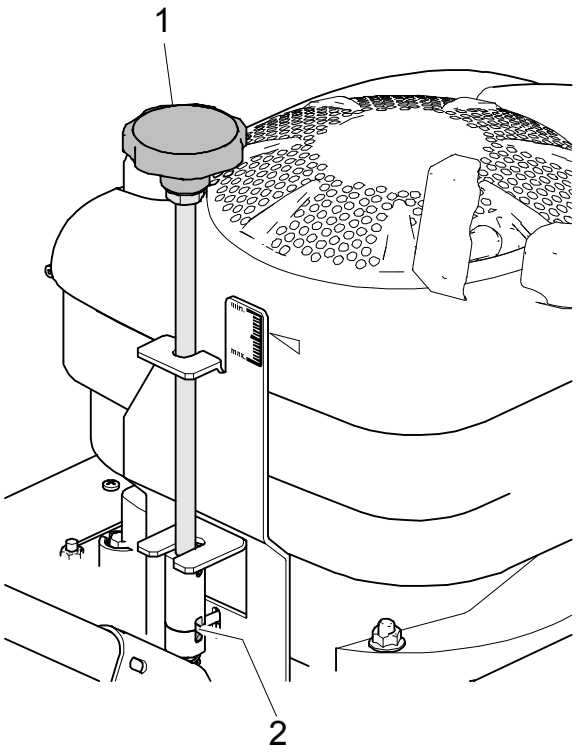
- The surface of the area to be worked on can be damaged.
- The brushes wear excessively.
- Parts of the area to be worked on can become loose and can be ejected or damage the device.
- Brush wires can break and be ejected or remain on the area to be worked on.

You know that the brush pressure is too high when

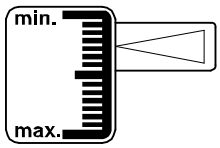
- strong formation of sparks occurs
- engine speed drops considerably
- the engine cuts off repeatedly

The time until the removed weed grows back is hardly affected by the cutting height; the brush wear, however, is significantly affected.

Adjusting pressure of brushes



1. Place the device on a sturdy area.
2. Start the device.
3. Press the central lever downward using the star grip (**1**) into the drive slot (**2**).
4. Turn the star grip to adjust the height of the brushes and thus the contact pressure. The entire engine with the brushes is moved up or down.
5. Test the setting on a test area.



The currently set height and the adjustment range is displayed on the scale.

Driving

Caution!
Unbalance can cause damage to the device within a short time. Immediately switch off the engine in case of strong vibrations or noise generation.

Danger!
Risk of injury caused by tripping or sliding while moving the mower backwards and turning it round. Make sure that the area is clear of objects and watch for safe footing.

Driving

Immediately switch off the brushes in case of a dangerous situation by releasing the engine brake lever.

Drive on:

1. Press the drive lever towards the handlebar – device is running.

Drive off:

1. Release the drive lever.

Adjusting speed:

The driving speed can be continuously adjusted with the vario lever.

Adjust the driving speed only when the engine is running.

Turning

Turning round on an even surface:

1. Switch off the drive.
2. Turn the device to the desired side.
3. Switch the drive back on.

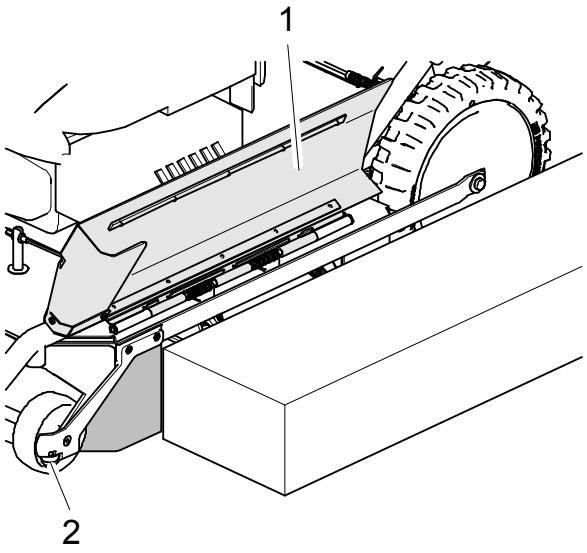
Turning round on a sloping area:

1. Keep the drive switched on.
2. Turn the device upslope.
3. Hold back the handlebar and the inner wheel.

The drive prevents sliding and supports the turn manoeuvre.

Brushing at a kerb or wall

Danger!
When you open the side flap, objects can be ejected.
Make sure that no persons, pets, or property are within the danger zone.



1. Move up to the area to be worked on as closely as possible.
2. Make sure that no persons, pets, or property are within the danger zone.
3. Lift up the side flap (**1**) using the side flap lever.
4. With the left side of the device, move up closely to the kerb or wall.
5. Release the side flap lever to close the side flap and to avoid the danger of objects being ejected.
6. The grinding protection (**2**) serves as guide along the kerb or wall.

Switching off and parking

Caution!
On a slope, the device can roll away.
Put the device on even ground only or secure it against rolling away.

1. Release the drive lever.
2. Release the engine brake lever.
3. Wait until the brushes stop before leaving the device.
4. Close the fuel valve.
5. Pull off the plug connector.

Maintenance and cleaning

Regular maintenance keeps your device ready for use.

If you do not observe the maintenance notices, faults may occur that are not covered by the warranty. Operational safety is endangered as well.

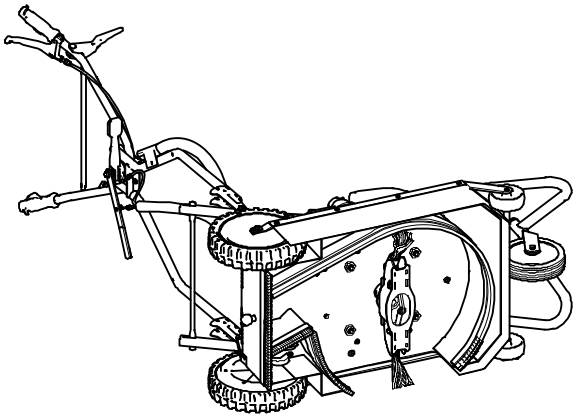
Contact your authorised service centre for checkup if you detect problems during maintenance.

Component	Action	Maintenance interval	
		Before and after each use	Annually or every 50 h
Device	Check for safe working condition.	■	▲
	Clean.	■	
	Customer service.		▲
Fuel	Check fuel level.	■	
	Is the tank cap closed?	■	
Tank, fuel valve, and fuel line	Check parts for leaks and check for good condition.	■	▲
Carburetor	Does the carburetor close again after starting?	■	▲
Ventilation grid	Clean.	■	▲
Engine cooling	Clean.		▲
Spark plug	Check/adjust.	■	
	Replace.		■▲
Air filter	Check/clean.	■	▲
	Replace.		■▲
Brushes and fastening parts	Check for wear and damage. See chapter "Checking the brushes".	■	▲
Brushes	Change.	■	▲
Engine brake	Do the brushes stop within 3 seconds?	□	▲
V-belt	Are the V-belts tensioned correctly, without fissures, and in good condition?		▲
Bowden cables	Check for proper function and ease of movement.	■	▲
Chassis and impact protection	Check for rust and fissures and check the welding seams.	■	▲

Component	Action	Maintenance interval	
		Before and after each use	Annually or every 50 h
	Are all protective device fastened correctly and properly functioning?	■	▲
Label	Condition of the labels.	■	▲
Engine	See operating instructions of the engine manufacturer.	■	▲
	Check oil level (see operating instructions of the engine).	■	▲
	Oil change.		▲
Flammable material	Remove easily flammable debris buildup from the engine and the device.	■	▲
Tires	Check tires and tire pressure if necessary.	■	▲

■ By the user when the engine is not running.
□ By the user when the engine is running.
▲ By the authorised service centre.

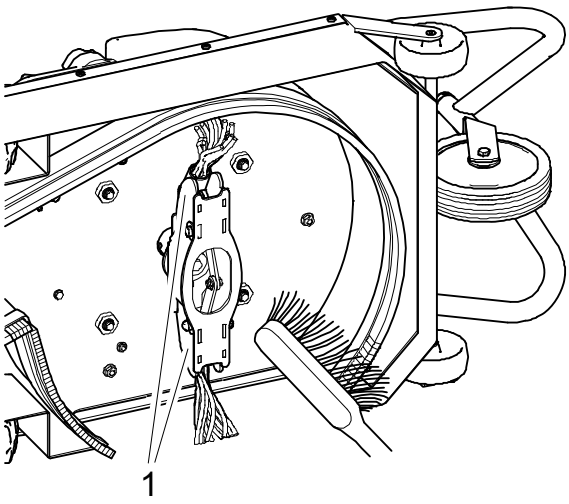
Preparations



Prior to all maintenance and cleaning work:

1. Let the device cool down for at least 20 minutes.
2. Pull off the spark plug connector.
3. Close the fuel valve.
4. Release the guide bar by pulling the tie rod and flip the guide bar into a vertical position (do not damage the Bowden cables).
5. Open the side flap.
6. Tilt the device to the left side according to the illustration.

Cleaning the device



Stubborn residual dirt are harmful to the ejection and affect the brushing result. To ensure sufficient engine cooling, also keep the engine cover, ventilation grid, and the engine clean.

Keep the brush holders (**1**) especially clean. You must be able to swivel them easily otherwise there is a risk of unbalance.

Fire hazard! Pay special attention so that components at the silencer are clean.

For cleaning use a hand brush. Remove stubborn soiling with a wooden or plastic spatula. Clean the outer housing parts with a cloth.

Do not rinse off the device with a water jet or high pressure cleaner! Do not use aggressive cleaning agents.

Cleaning the dirt collecting bag

After brushing, clean the dirt collecting bag thoroughly with water. The fabric is to stay air permeable. Residue of dirt clog the fabric and thus worsens the collecting performance.

Checking the brushes

Caution:
Unbalance of the brush system leads to destruction of the engine bearing and device.
Never operate the device in case of unbalance of the brush system.

Check the brushes at regular intervals, prior to each use and when you detect noticeable changes.

Thrown wires or brushes can cause severe injuries.

Strong noise development or vibrations indicate unbalance at the brush system. Unbalance can be caused by one-sided wear of the brushes or improperly used brushes.

A change of the brushes is required

- when the wire bristles do not touch and clean the floor any longer despite higher contact pressure.
- when there is an unbalance.

– when the brushes are worn unevenly.

Checking the engine brake

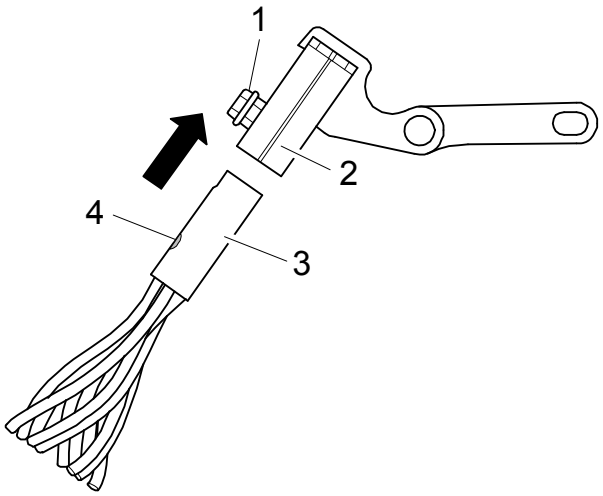
Check the engine brake for proper function by switching off the engine. The brushes must stand still within less than 3 seconds. Contact an authorised service centre if this is not the case.

Changing the brushes

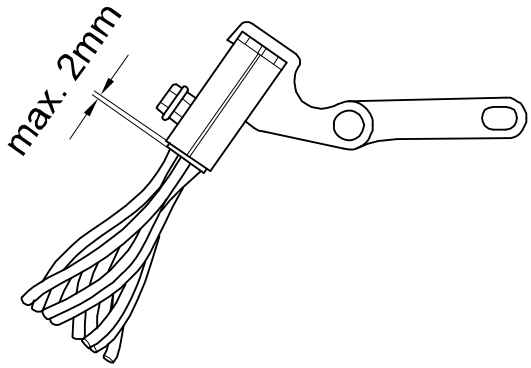
Caution:
Unbalance of the brush system leads to destruction of the engine bearing and device.
Observe the following notices.

– Change the brushes only in pairs.
– For replacement of the brushes use only new brushes, never used ones.
– Always push the brushes all the way into the brush holder.
– If the brushes cannot be inserted easily into the brush hoer, contact an authorised service centre.

Use working gloves for changing the brushes.



1. Slacken the brush holding screw (**1**) at the top side of the brush holder (**2**).
2. Pull the brush (**3**) out of the brush holder.
3. Push the new brush all the way into the brush holder. If the brush is inserted correctly, the brush holding screw is positioned exactly over the recess (**4**) at the brush.



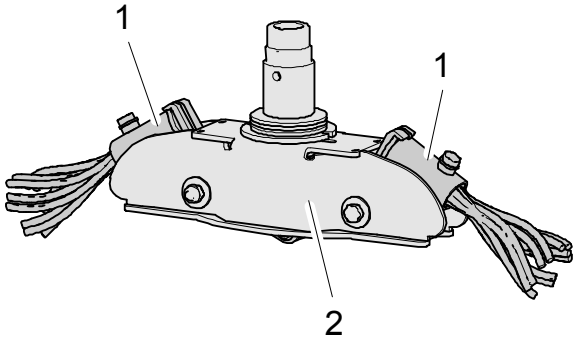
1. Tighten the brush holding screw with a torque of 20-25 Nm.
2. Change the second brush in the same manner.
3. Set the brush height to the highest position.

Only use original AS brushes with the spare part number E09751. Original AS brushes are engraved like this:

AS

Checking the brush strip and the brush holder

Danger!
Improperly maintained or mounted brush strips or holders can pose a high risk of injuries.
Work at these parts may only be carried out by an authorised service centre.



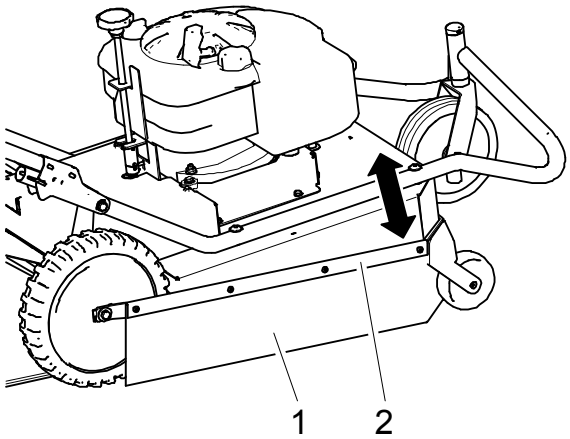
Check the brush strip (**2**) and brush holder (**1**) regularly and prior to each use and when you detect noticeable changes regarding cracks and damages. If there are damages, immediately contact your service centre.

The brush holders must be moved easily (remove dirt).

Basic inspection

To ensure a safe working condition of the device, check all nuts, bolts, screws, connections of fuel lines, air filters, etc. regularly for firm seating. Check the ignition wire and the spark plug connector for damage.

Immediately replace any damaged or used parts, especially covers, brush strip, side and rear cover, protection skirt, dirt collecting bag, silencer, or fuel tank (authorised service centre).



Check that the protection skirt frame (**2**) can be moved easily. When you tilt the device backwards, the protection skirt (**1**) must continue to touch the ground.

Maintaining the engine

Danger!
If the speed of rotation is set too high, objects can be ejected. The engine can be damaged and noise pollution increases.
Do not change the basic setting of the carburetor or the speed control.

The operating instructions of the engine are prepared by the engine manufacturer. They contain the maintenance instructions and the warranty conditions for the engine. If warranty work for the engine is required, please contact your authorised service centre or the nearest authorised engine dealer.

Checking the engine oil level

The oil level must remain between the two markings of the oil dipstick. Make sure that the oil level is never below the bottom marking; otherwise the engine can be damaged. Never fill in oil above the top marking. Otherwise, there is a risk that the oil enters and destroys the air filter.

For this, observe the attached operating instructions of the engine.

Checking the spark plug

Danger!
The ignition system generates an electromagnetic field.
Wearers of pacemakers must not work on live parts.

Soiled spark plugs reduce the engine output. Clean the electrode of the spark plug with a brass wire brush. Check the electrode gap (see operating instructions of the engine manufacturer). Make sure that the insulator around the electrode is not damaged. Never use a damaged spark plug.

Tighten the spark plug using the correct torque (see operating instructions of the engine).

Cleaning the air filter

Danger!
Cleaning agents pose a fire and explosion hazard.
Never clean the air filter with flammable solvents.

Always make sure that the air filter is clean. A dirty air filter affects the engine output and increases the fuel consumption. Independent from the number of operating hours the filter inserts should be changed at least annually. Do not operate the engine without air filter.

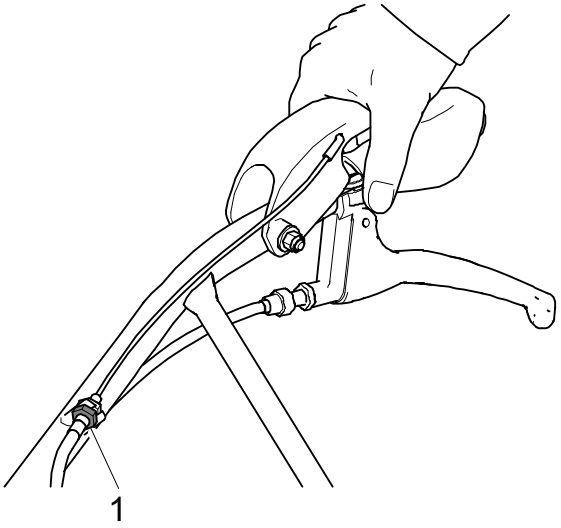
The foam rubber prefilter picks up the coarse dust. It is possible, in case of strong dust formation, that it has to be cleaned or changed already again after 10 minutes. We recommend to carry along some cleaned or new prefilter in reserve and to replace them at short intervals.

For this, observe the attached operating instructions of the engine.

Checking the drive

1. Put the device on a non-slip surface (e.g. concrete or asphalt).
2. Switch off the engine.
3. Actuate the drive.
4. Try to pull the device backwards.

If the rear wheels lock, the drive is correctly adjusted. If you can pull the device, the drive must be re-adjusted.



Re-adjusting the drive

Turn the adjusting screw (**1**) at the drive so that the wheels lock, while the drive is actuated, when the device is pulled. If there is no improvement after the adjustment, have the device checked by an authorised service centre.

Bearing

Storage

Keep the device in a closed, dry, and well ventilated room and out of reach of children. Always eliminate all problems of the device before you store it so that the device is always in a safe-to-operate state. Let the engine cool down before you store the device in closed rooms.

Longer storage

1. Observe the safety instructions regarding the handling of fuel.
2. Draining fuel tank: Put a piece of a tube on the fuel valve and fill the fuel in an adequate fuel container.
3. Emptying carburetor: Start the engine and let it run until it stops on its own.
4. Clean the device thoroughly.

5. Touch up defects in painting (for spray paint, see Accessories).
6. Performing corrosion protection on the engine:
   - Unscrew the spark plug.
   - Fill a tablespoon of engine oil into the spark plug opening.
   - Pull the starter rope slowly until you get resistance (oil distribution in the cylinder).
   - Re-insert the spark plug and screw in fully.
   - Do not fit the spark plug connector!

In autumn, have your device checked by an authorised service centre!

Also observe the notices on storage in the attached operating instructions by the engine manufacturer.

Restarting

If you want to start the device after a longer storage, carry out the tasks described in chapter Maintenance.

Spare parts

The reliable and safe operation of the device also depends on the quality of the spare parts used. Only use original spare parts and accessories that were approved by “AS-Motor Germany”. When foreign parts are installed, the warranty and guarantee shall be void for the foreign part and for the device and for any resulting damage.

Inform your authorised service centre about the device type and serial number of your devices when you order spare parts.

Wear parts

Some parts are wear parts. They wear during use and must be replaced. The warranty does not cover the following parts:

Brush, brush strip, sliding disc, disc spring, cables, V-belt, starter rope, grinding protection, protection skirt, dirt collecting bag, wheels.

Accessories

Operating hours counter E10740

Disposal

Depending on the natural cover and soiling of the areas to be cleaned, consider the regulations for disposal of litter. For this, contact your local local/municipal administration.

Dispose of waste oil and fuel in accordance with the local regulations or return it to an oil shop.

Packaging, device, and accessories are made of recycable materials and must be disposed off accordingly.

Warranty

The conditions of the warranty can be found on the reverse side of your warranty card. Send the filled-out warranty card immediately after the purchase of your device to “AS-Motor Germany” or the supplier. Otherwise, the warranty is no longer valid.

Preserve the proof of purchase or the warranty card that was filled out by the vendor.

Troubleshooting

The following table contains the most frequent problems and their elimination. If more problems occur, contact the closest authorised service centre.

You can find an authorised service centre on our home page www.as-motor.de.

Problem	Possible cause	Remedy
Engine does not start	Engine brake lever is not pressed.	Press engine brake lever towards the handlebar.
	Fuel valve is closed.	Open fuel valve.
	No fuel is in the tank.	Refill fuel.
	Device was tilted - air filter is oily.	Replace air filter, unscrew spark plug, and start several times when the fuel valve is closed, dry the spark plug and screw it back in.
	Engine was flooded due to too many start attempts.	Unscrew spark plug and start several times when the fuel valve is closed, dry the spark plug and screw it back in.
	Spark plug connector is pulled off.	Observe safety instructions! Put spark plug connector back on.
	Air filter is soiled.	Clean air filter (see also Maintenance and cleaning).
	Spark plug is sooted, damaged or incorrect electrode gap.	Clean spark plug and check electrode gap (see also Maintenance and cleaning). Replace spark plug if necessary.
	Poor quality, dirty, or old fuel.	Clean fuel system (authorised service centre). Always use fresh fuel.
Engine starts badly or runs irregularly	Air filter is soiled.	Clean air filter (see also Maintenance and cleaning).
	Poor quality, dirty, or old fuel.	Always use fresh fuel.
	Spark plug is sooted, damaged, or incorrect electrode gap.	Clean spark plug and check electrode gap (see also Maintenance and cleaning). If necessary, replace spark plug.

Problem	Possible cause	Remedy
No drive when drive lever is actuated	Variomatic Bowden cable is insufficiently tensioned.	Authorised service centre.
	Driving belt is insufficiently tensioned.	Authorised service centre.
Brushed do not turn	Replace the friction discs.	Authorised service centre.
	Brush strip is loose.	Authorised service centre.
Strong vibrations during operation	Unbalance at the brushes due to uneven wear or incorrect insertion of the brushes.	Immediately replace the brushes or mount correctly (see chapter Maintenance).
	Brush drive shaft is bent due to collisions with foreign objects.	Authorised service centre.
	Engine fastening is loose.	Authorised service centre.
	Brush strip fastening is loose.	Authorised service centre.
Irregular noises	Loose fastening elements.	Authorised service centre.
	Silencer defective.	Authorised service centre.
Engine is smoking	Air filter is soiled or drenched with oil.	Clean or replace the air filter (see also Maintenance and cleaning).
	Oil level is too high.	Have authorised service centre lower the oil level to the marking.
Engine gets hot	Ventilation grid is dirty.	Clean ventilation grid.
	Oil level in the engine is too low.	Refill engine oil (see operating instructions of the engine manufacturer).
	Cooling fins of the engine are dirty.	Have cooling fins cleaned by authorised service centre.
Ejection channel is clogged	Engine speed too low despite full throttle.	Authorised service centre.
The engine does not switch off	Switching off system is defective.	Close the fuel valve. Authorised service centre.

Technical data

Type	AS 50 B1/4T 1/4T
Range of application (temperature)	5 – 30 °C
Engine, type Manufacturer Type Cylinder capacity Performance Engine speed	One cylinder four stroke engine Briggs & Stratton 825 series 190 cm^3 3.1 kW (4.3 PS) 2800 min^{-1} See also operating manual of engine manufacturer
Cutting device, type Working width Brush height	Brushes 50 cm adjustable
Starting device	Rope start
Drive	Rear wheel drive with Variomat for continuously variable setting of the speed 1.6 -2.5 km/h
Maximum output per unit area	up to approx. 1000 m^2/h
Measures and weight Transport size with packaging L/W/H Operating dimensions L/W/H Weight	 112/65/65 cm 192/61/99 cm 70 kg
Capacities Fuel tank Engine oil Dirt collecting bag	 1.5 litres approx. 0.65 litres SAE 30 or 10W-30 (see Checking the oil level) approx. 25 litres
Sound level Measured sound level L_{WA} Sound level at working place L_{pA} Measurement uncertainty k	 96 dB according to DIN EN 836 85 dB according to DIN EN 836 2.5 dB (A)
Vibration emission value Hand-arm-vibrations $a_{h,w}$ Measurement uncertainty U	 3.7 m/s^2according to DIN EN 836 2 m/s^2

AS-Motor Germany GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann
www.as-motor.de

Declaration of conformity

We declare that the weed remover type
and with the serial number

AS 50 B1/4T
starting from
016610020001

in the version we introduced to the market complies with all essential health and safety requirements of the following EC directives.

- 2006/42/EC
- 2004/108/EC
- 97/68/EC

Function:
The device is exclusively intended for cleaning paved areas and edges on which moss and weeds grow.

Applied standards: EN 836 (partially)

Person authorised to compile the relevant technical documentation:
Frank Einsiedler
AS-Motor Germany GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann

Bühlertann, July 2010	per proxy Frank Einsiedler Head of development	Christoph Weber Managing director

AS-Motor Germany GmbH & Co. KG
Ellwanger Straße 15
D-74424 Bühlertann
www.as-motor.de

Professional technology for gardens and landscapes

Allmäher®	Manoeuvrable meadow mower for extensive green area care. The Allmäher reliably shreds high grass, scrub, and weeds also on steep slopes and in difficult terrain. The grass cuttings are left to fertilise the ground so there is no more raking grass.
Ride-on Allmäher®	Ease of use and high area coverage all combined in a compact lawn mower. Low centre of gravity, optimum weight distribution, and broad wheel base provide you with the best performance on slopes and power reserves for shredding high plant growth. Also available in an all-wheel version providing the extra traction for demanding applications and for superior safety on slopes.
Rear discharge mower	Professional lawn mower with rear discharge. With wheel drive and infinite speed regulation for exceptional cutting and catching performance in any situation.
Rotary mower	The economic alternative to bar mower. Ideal for fodder production. The grass is not shredded and placed into a pile on the side.
Flail mower	The flail mover blades are supported movably and avoid rocks and other obstacles and chop the cuttings several times. The steel housing is 3 mm thick and offers very high security against foreign objects that were ejected and blown around and catches them safely.
Side discharge mower	This solid allrounder has a side discharge, wheel drive, and a housing of 3 mm thick plastic-coated steel. Also available in an all-wheel drive version and infinite speed regulation (Variomatic).
WeedHex	Removes weeds carefully, quickly, and without the use of chemicals: on transport surfaces, walls, curbs, and between interlocking blocks. The patented pivoting brush system goes easy on surfaces and is environment-friendly regarding harmful herbicides.